

SOME NEW OR LITTLE-KNOWN HETEROCERA.

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(With 3 text-figures.)

FAMILY AGARISTIDAE

1. *Hespagarista caudata eburnea* subsp. nov. (text-fig. 1, ♂)

♂. Colore eburneo magis extenso distinguenda.

Hab. Manow, German East Africa, 1 ♂, received from Messrs. Standinger and Bang-Haas.The forewing is slightly narrower than in *H. c. caudata* Dew. (1879), from Angola, and the posterior antemedian and the submarginal spots are larger. The

FIG. 1.

creamy-white area of the hindwing almost reaches to the base, and the black marginal band is narrower than in true *caudata*; moreover, there is no discocellular spot on the hindwing, and only the subcostal vein is distinctly black, the others being black at the marginal band, and the median nervure also at the base.2. *Damias amoena rookensis* subsp. nov. (text-fig. 2, ♂)In Seitz, *Grossschm.* xi. p. 13 (1912), I treated *chalybeata* Roths. (1896) and *amoena* Roths. (1896) as the sexes of one species, because we only had ♂♂ of the one and ♀♀ of the other. Meek has now sent us from Rook Island two ♂♂ and

FIG. 2.

one ♀ which are practically alike, agreeing almost exactly with the ♀ named *amoena* Roths. (1896). As it is not probable that the ♂ is dimorphic, I must reverse my opinion and consider *amoena* and *chalybeata*, distinct in spite of the absence of any tangible structural differences.

The Rook specimens are distinguished from *D. a. amoena* from New Britain, of which we have three ♀♀, in the band-like patch of the forewing being somewhat broader, particularly in extending to the cell before the lower median vein.

FAMILY GEOMETRIDAE

3. *Eubordeta concinna* nom. nov.

Eubordeta flammea Jordan (nec *flammeus* B. Baker, 1910), *Nov. Zool.* xviii, p. 598. no. 3 (1911).

I propose the above name for the species called by me *flammea*. When publishing that name I entirely overlooked that there was already a *flammeus* in the genus, though mentioned by me on p. 597, *l.c.*

4. *Milionia lepida* spec. nov.

♂. Nigra, cyanescens, alis anticis fascia recta obliqua mediana maculaque parva basali caeruleis, posticis a basi ad medium usque caeruleo-bistriatis.

Al. ant. long.: 21 mm.

Hab. Near Oetakwa R., Dutch South New Guinea, up to 3000 ft., October—December 1910 (A. S. Meek), 2 ♂♂.

Velvety black; body cyaneous, glossy, with a greenish tint in certain lights.

Wings, *upperside*: forewing with a small glossy-blue diffuse basal patch, widest before hindmargin, and a greenish blue straight oblique median band from below costa to hindmargin close to angle, 3.5 mm. wide, the outer edge of band incurved below M².—Hindwing with a cyaneous tone, with two glossy-blue streaks, one on the median vein and the other on the submedian; fringe of both wings with grey tips.

Underside: band of forewing enlarged to a broad patch, which is rounded on the outer side and strongly tapers before hind angle, cross-veins about in centre of patch, while on the upperside they are nearer the outer edge of the band, basal patch almost joining the median one, interspace deep blue.—Hindwing: cell bordered with a broad glossy-blue streak anteriorly and posteriorly, a thin streak also at abdominal margin. No patch of modified scales near apex as in *M. callima* R. & J. (1905).

5. *Milionia paradisea beata* subsp. nov.

♀. Alis posticis ad apicem aurantiaco marginatis distinguenda.

Hab. Goodenough, d'Entrecasteaux Islands, 2500—4000 ft., April 1913 (A. S. Meek), 2 ♀♀.

Band of forewing appreciably broader than in *M. p. paradisea*. Red band of hindwing, on the contrary, somewhat reduced, being shorter and ending anteriorly in a point; apical margin narrowly bordered with orange, this border a little longer below.

FAMILY LIMACODIDAE

6. *Casphalia nigerrima* Holl. (1893)

Casphalia nigerrima Holland, *Psyche* vi, p. 397 (1893) (Ogowé R.).

Dr. Holland described the species from a ♂. The British Museum has a coloured figure of this ♂, and we have a specimen of both sexes. Our ♂ agrees

with the figure in the mesothorax bearing two round black dots on each side in front, as, for instance, in *C. extranea* Walk. (1869). The head is orange in front of the antennae, and the base of the third abdominal tergite is rather broadly orange and the bases of the following segments narrowly so. In both sexes the base of the costal margin of the forewing is creamy white like the anterior portion of the mesonotum.

In the ♀ the head is black; the base of the antenna bears some orange scaling; abdomen orange, with a broad dull black diffuse median stripe, which widens posteriorly, but is here much mixed with orange; legs deeper black than in ♂, and the femora less extended orange.

Our specimens came from Bopoto, Congo (Oram coll.).

7. *Casphalia citrimaculata* Anriv. (1905)

The species was described from a single ♀ from Victoria, Cameroons. The Oxford Museum contains a ♂ which agrees well with the description, except in some points which may be due to difference of sex. This ♂ was caught by Dr. W. A. Lamborn near Oni, 70 miles east of Lagos, east shore of Lekki Lagoon, Nigeria, 0-100 ft., in a forest with paths and natural clearings.

Forewing 14 mm. long; hindwing small, with the anal angle produced and the apex subacuminate. About fourteen segments of the antenna with long pectinations, scale-hairs at base of antenna orange-ferruginous. Foretarsus from apex of first segment pale yellow, mixed with some black scaling, particularly on fifth segment; the other tarsi less extended yellow beyond centre. A rather large orange-yellow lateral spot at base of abdomen extends on to metathorax. Marginal band of hindwing nearly as broad at anal angle as at apex, narrower in between, centre of hindwing slightly transparent.

Cell of hindwing truncate, stalk of subcostal and first radial half as long as the cell is broad.

8. *Casphalia elongata* spec. nov.

♀. *C. citrimaculatae* Anriv. (1905) colore similis, sed pectore abdomineque nigris unicoloribus.

Al. ant. long. 20 mm., lat. 7 mm.

Hab. Mombasa, British East Africa, October 1905 (F. J. Jackson), 1 ♀.

Body black, collar anteriorly orange, a few orange hairs at the base of the antenna, on palpus, forecoxa, and on the soles of the tarsi.

Forewing very long and narrow, without traces of hind angle, black like body, with a faint olive-brown tint; just outside cell an ovate lemon-yellow patch, which is pointed behind and extends from near costa to beyond R^3 .—Hindwing lemon-yellow, small; abdominal margin half the length of distal one; anal angle obtuse, rounded off, not produced; apex subacuminate; black marginal band widest at apex, measuring here 3 mm. and only 1 mm. in its posterior half; costal margin very narrowly black; a distinct black discocellular spot.

Neuration: Forewing, subcostals 2 to 5 stalked together, 2 more proximal than 5.—Hindwing: subcostal and radial 1 in right wing on a very short stalk, in left wing separate; cross-vein between radials 1 and 2 very oblique, the upper cell-angle being much more produced than the lower; cross-vein D^3 between radials 2 and 3 angulate; radial 3 and median 1 near together from lower cell-angle; median 2 from middle of cell.

9. *Casphalia elegans* spec. nov.

♂ ♀. Nigra; prothorace ferrugineo: mesothorace macula magna utrimque ante alam sita sulphurea notato; abdomine et pectore aurantiacis; alis anticis puncto minuto basali et fascia maculari subapicali pallide sulphureis; posticis aurantiaco-sulfureis (♂) vel aurantiacis (♀), nigro-limbatis, puncto medio nigro.

Al. ant. long. ♂ 13 mm., lat. 5 mm.

♀ 18 „ „ 7.5 „

Hab. Gambaga, Gold Coast Hinterland (Dr. Bury), 1 ♂ and 1 ♀.

Head, palpi, antennae, upperside of thorax, tibiae, tarsi, and upperside of femora, in ♂ also base of abdomen black, a few yellow hair-scales on frons and at base of antennae, and pale orange scaling on upperside of palpi; collar ferruginous orange; abdomen and breast orange, a large spot on each patagium in front of wing sulphur-yellow. Hair-scales on sole of hindtarsus partly clayish buff. In ♀ tip of abdomen black.

Wings, *upperside*: forewing in shape similar to that of *C. flavicollis* Walk. (1856), dull brownish black, a small spot at extreme base, a macular subapical band sulphur-yellow, the band close to cell from radial 1 to below median 1, consisting of five spots, the upper two spots a little more proximal than the others and 2 to 3 mm. long, the next two somewhat smaller, the fifth small, in ♀ vestigial.—Hindwing in ♂ pale yellow shaded with orange, in ♀ orange; anal angle distinct, in ♂ projecting; a narrow black marginal band, in ♂ extending along abdominal margin to base; width of distal border at apex 1 mm. in ♂ and nearly 2 mm. in ♀, below centre $\frac{1}{2}$ mm. in ♂ and very little more in ♀; abdominal border of ♂ a little over 1 mm., absent in ♀; a discocellular spot also black, joined to the diffuse black costal border in ♂, isolated in ♀, the costa not being black in ♀.

Underside similar to upper, sulphur-yellow basal spot of forewing absent, subapical band slightly wider, the last spot of it larger and better defined; black costal border of hindwing of ♂ somewhat broader.

Neuration essentially as in *C. extranea* Walk. (1869).

Genitalia of ♂: Tenth tergite and sternite longer and slenderer than in *C. extranea*, the apex of the tergite less abruptly bent downwards. Claspers much shorter, not produced into a long apical process, as is the case in *extranea* Walk. (1869), *nigridorsa* Anriv. (1905), and *nigerrima* Holl. (1893).

Zarachella gen. nov.

♀. Prope *Casphaliam* Walk. (1866). Alarum anticarum costae subcostales 1^a et 2^a liberae, 3^a, 4^a, 5^a petiolatae, radialis 1^a ab cellulae angulo superiore fortiter producto emissa, medianae 1^a et 2^a petiolatae; alae posticae rotundati-ovatae, cellula inter costas radiales 1^{am} et 2^{am} aperta, radialis 1^a cum subcostali longissime petiolata.

Genotypus: *Z. specularis* spec. nov.

The genus is a most interesting one as regards its neuration. On forewing subcostal 1 very little more distal than stalk of medians; upper angle of cell much produced; subcostal 2 from near upper angle, 3, 4, and 5 stalked, 4 halfway between 5 and apex of 3; radial 1 from very close to stalk of subcostals; cross-vein D² angulate, upper arm of angle long, lower short; radials 2 and 3 close together, 3 from above cell-angle; medians on a short stalk, which is longer in the left wing than in the right one. Hindwing with the costal and distal margins completely

rounded, ovate, small, without angles; costal and subcostal fused from base to one-fourth, then diverging, the costa following the strong curve of the costal margin, the subcostal throwing off radial 1 not far from margin; no cross-vein between radials 1 and 2, which are widely separated, the cell being bounded in front by the cell-fold; radials 2 and 3 and median 1 near together, median 2 much more proximal.

Otherwise agreeing with *Casphalia*. Longer spur of hindtibia about as long as the tibia is broad.

10. *Zarachella specularis* spec. nov. (text-fig. 3)

♀. Nigra, paululo purpurascens, fronte, pronoto atque metanoto albo-guttatis, alis anticis macula bipartita sub cellulæ angulum inferiorem sita et posticis altera magna centrali ovata albis subhyalinis ornatis.

Long. al. ant. 14·5 mm., lat. 5·5 mm.

„ „ post. 7 „ „ 5 „

Hab. Malvern, near Durban, Natal, 700—800 ft., November 18, 1903 (Cecil N. Barker); 1 ♀ in the Hope Department at Oxford.

The small size of the hindwing gives the specimens the appearance of a ♂; but it is a ♀, as proved by the antenna, genitalia, frenulum, and retinaculum.



FIG. 3.

Dull black with a slight purple tone. Scaling on apical fourth of antenna white. A central spot on the frons, a transverse one on each side of the collar, a lateral tuft on the metanotum, a small costal spot each on the forewing above and on the hindwing below, as well as a semitransparent patch on each wing white; the patch of the forewing consisting of two spots R^2-M^1 , with an indication of a third, minute spot below M^1 , the patch a little over 2 mm. long; the patch of hindwing central, ovate, a little nearer to the distal than to the costal and abdominal margins, the black border being narrowest at the lower median vein.